

REMARKS

The rejection under 35 USC §102(b)

The rejection of claims 97, 159-160, 163-166, 169-170 and 173-175 under 35 USC §102(b) for being directed to subject matter assertedly anticipated by the disclosure of Southern, Genomics (1992) 13:1008 [hereinafter "Southern"] was maintained. In the rejection, the again relies basically on Figure 3 in Southern to support the rejection.

In response to the applicant's previous argument, the examiner asserted that

[t]he instant claims merely require that the arrays are physically separated. The four-quadrant arrangement is encompassed by the physical separation because a quadrant defines a physical location on a surface. Assignment of an array to a quadrant defines a boundary between quadrants, the boundary being the point of physical separation. In other words, if the arrays are not physically separated, they cannot be in different quadrants.

The amendment to claim 97 herein requires that individual microchips are separated by a barrier, and inasmuch as claim 157 reciting barriers was not rejected, the applicant submits that the amendment obviates the 102(b) rejection.

The rejection under 35 USC §102(e)

The rejection of claims 97, 157-160, 163-170 and 173-175 under 35 USC §102(e) for being directed to subject matter assertedly anticipated by the disclosure of Winkler, US Patent No. 5677195 [hereinafter "Winkler"] was also maintained. In response to the applicant's previous arguments, the examiner asserted that

the features upon which the applicant relies (i.e., 4096 oligos having distinct sequences are arrayed on a chip, 4096 chips are produced and then arrayed) are not recited in the rejected claims. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. [Citation omitted.] It is noted that the instant claims do not require that the oligonucleotide probes differ and do not require any specific number of probes. The claims merely require 'an array of oligonucleotide probes.' Furthermore, it is noted that the passage cited from the specification is 'one exemplary embodiment' and therefore does not define and/or limit the invention.

As noted The applicant refers the examiner to the specific language of claim 97 which recites "microchips having oligonucleotides with different sequences attached thereto." Thus, the examiner is incorrect in asserting that the claims require that the probes differ. Regardless of the actually number of oligonucleotides in the on the microchip, the limitation that oligonucleotides with different sequences are present is distinct from the disclosure of Winkler and the rejection must therefore be withdrawn.

The rejections under 35 USC §103

The examiner also maintained rejection claims 162 and 172 under 35 USC §103 for being directed to subject matter allegedly rendered obvious by the disclosure of Winkler in view of the disclosure of Augenlicht, US Patent No. 4981783 [hereinafter "Augenlicht"].

For reasons discussed above, the disclosure of the primary reference Winkler cannot anticipate the subject matter of the broad claims because it fails to disclose each and every limitation of these claims. Because the limitations of the broad claims attach to the subject matter of the dependent claims, Winkler cannot disclosure all limitations of these claims either. Adding in the disclosure of Augenlicht fails to correct this deficiency in the Winkler disclosure because Augenlicht does not disclose arrays of physically separate microchips or arrays wherein the microchip or array had oligonucleotides with different sequences attached. Absent a combination of references that teach all limitations of the claims, the combined disclosures cannot render obvious the claimed subject matter and the rejection over the disclosures of Winkler and Augenlicht may properly be withdrawn.

The double patenting rejection

The examiner also rejected claim 97 and 157 through 175 on the ground of obviousness type double patenting as being directed to subject matter that is assertedly not patentably distinct from the subject matter of claims 1 through 8 in US Patent No. 6,383,742. While not admitting to the propriety of the examiner's rejection, applicant files herewith a terminal disclaimer thereby obviating the rejection.

CONCLUSION

In view of the amendments and remarks made herein, the applicant submits that all claims are in condition for allowance and requests notification of the same.

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Respectfully submitted,

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